

TUBERCULOSIS INFECTION CONTROL PLAN FOR COUNTY JAILS

Facility Name: _____

Date of Preparation: _____

I. Introduction

This document was developed by the Wisconsin Department of Health and Family Services to be used as a template for county jails to satisfy the Department of Commerce requirement of a written Tuberculosis Control Plan. This requirement is exercised under the authority of Wisconsin State Statute 101.11, employer's duty to furnish safe employment and place. All items in regular type are required components of the plan and those in *italics* are voluntary. References for this document include:

CDC. Controlling TB in Correctional Facilities. 1995.

CDC. Prevention and Control of Tuberculosis in Correctional Facilities: Recommendations of the Advisory Council for the Elimination of Tuberculosis. MMWR 1996;45, RR-8.

CDC. Core Curriculum on Tuberculosis: What the Clinician Should Know. 1994.

CDC. Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994. MMWR 1994;43, RR-13.

U.S. Department of Labor. OSHA Instruction CPL 2.106. 1996.

II. Purpose

The purpose of this tuberculosis (TB) infection control plan is to: Reduce the risk of transmission of tuberculosis to staff and inmates, of

_____ (name of facility).

TB infection control will be accomplished through symptom screening of inmates, TB skin testing of long-term inmates, and periodic TB skin testing / surveillance of staff to identify persons who have active TB disease or latent TB infection.

III. Scope and Definitions

Staff and employee: all persons working in a correctional facility who have the potential for exposure to *Mycobacterium tuberculosis*. This may include, but is not limited to, jailers, deputies, other law enforcement personnel, health services staff, part-time personnel, temporary staff not employed by the facility; and persons not involved directly with inmates but who are potentially at risk for occupational exposure to *M. tuberculosis* as a result of shared air within the same facility (e.g., clerical staff, volunteer workers, janitorial staff, housekeeping staff, and maintenance staff).

Long-term correctional facilities: State and federal prisons, juvenile facilities, and some jail facilities that house predominately long-term inmates, most of whom have been tried and sentenced.

Long-term inmate: An inmate who will remain in custody ≥ 14 days.

Short-term correctional facilities: Jails, detention centers, and temporary holding areas that house predominately short-term inmates, most of whom are awaiting trial or serving brief sentences.

Short-term inmate: An inmate who will remain in custody <14 days, especially pretrial detainees who probably will be released without supervision or placed in the community under court supervision.

This facility is classified as a _____ (long-term or short-term) facility, housing _____ (long-term and/or short-term) inmates.

IV. Responsibility and Risk

A. Assignment of Responsibility

1. _____ (insert name of person or position) shall have responsibility for the tuberculosis prevention and control program.
2. The Tuberculosis Infection Control Plan will be reviewed on an annual basis. _____ (insert name of person or position) is responsible for annually reviewing this program and its effectiveness, and for updating this program as needed.
3. *If additional expertise exists within the department in the areas of infection control, occupational health and engineering, personnel from those areas will be included in infection control decision making. (If your facility has an infection control committee, attach membership names, titles, and*

duties as an appendix. Appendix A provides a sample form for committee membership).

4. This facility is located in the health department jurisdiction of _____ (insert name of local health department).

B. Initial Risk Assessment

An initial risk assessment will not be performed. This facility is assumed to be low risk until it exceeds 6 cases of TB disease per year. This facility will follow all applicable surveillance activities appropriate for the low risk category. This facility will annually check facility surveillance records of staff and inmates to see if the facility remains below 6 cases per year (for low risk--see Appendix B).

C. Community TB Profile

An annual profile of TB in the community will be obtained from the local health department by _____ (Name or position)

V. Staff TB Training and Education

- A. Training and information to assure employee knowledge the mode of TB transmission, its signs and symptoms, medical surveillance and therapy, and site specific protocols including the purpose and proper use of controls (e.g., respirators) shall be provided to all current employees and to new workers upon hiring. Training shall be conducted by _____ (insert name of person or position) and repeated every _____ year (s).

1. The training material shall be appropriate in content and vocabulary to the educational level, literacy, and language of employees in the facility.
2. Workers shall be trained to recognize, and report to a designated person, any inmates with symptoms suggestive of infectious TB and instructed on the post-exposure protocols to be followed in the event of an exposure incident (see Appendix C).
3. All staff members will report signs and symptoms suggestive of infectious TB to _____ (insert name of person or position) .

- B. All staff members should know if they have a medical condition or are receiving a medical treatment that may affect their immune system. These conditions may include (but are not limited to) HIV infection, viral infections, Hodgkin's disease, sarcoidosis, recent live virus vaccination (within 6 weeks), use of corticosteroids or immunosuppressive drugs.

VI. Staff Screening and Surveillance

A. Skin Test Screening of Staff

1. Standard Mantoux tuberculin skin tests using 5TU of purified protein derivative (PPDs) will be performed on staff at the beginning of their employment, and repeat PPDs annually on all PPD-negative staff. For staff who have not had a documented negative PPD result during the preceding 12 months, the baseline skin testing will employ the two-step method. In addition, these staff will be tested whenever they have been exposed to an inmate or staff member with active TB and appropriate precautions were not observed at the time of exposure.
2. Outside vendors who regularly provide services within the facility should also have documentation of a tuberculin skin test and follow the same procedures as for staff outlined below.
3. _____ (insert name or position if conducted by facility personnel or insert name of contracting agency) will administer the Mantoux Tuberculin Skin Tests at _____ (insert location) (*See Form 1 for sample tuberculin skin test consent.*)
4. All PPDs will be read and interpreted by a qualified individual (not the person to whom the test was applied) consistent with the interpretative guidelines set by CDC (see Appendix D).

_____ (insert name or position if conducted by facility personnel or insert name of contracting agency) will read and interpret the Mantoux Tuberculin Skin Tests.
 - a) At the time skin test results are read, the staff member will be informed about the interpretation of both positive and negative PPD results. The PPD results will be recorded confidentially in the individual staff member's health record (see Form 1 for a sample skin test record)

and in an aggregate database of all staff PPD results.
(See Appendix E for sample staff database).

- b) Staff who have a documented history of a positive PPD, adequate treatment for disease, or adequate preventive therapy for infection, will be exempt from further PPD screening. They will be followed by monitoring signs and symptoms. (See Appendix F).
- c) In any area of the facility where transmission of *M. tuberculosis* is known to have occurred, a problem evaluation will be conducted (see Appendix G).
- d) Employees who exercise their right to refuse the tuberculin skin test must be monitored using other acceptable screening methods (such as signs and symptoms, see Appendix F). *Any refusal should be documented in their employee record. The tuberculin skin test will be offered to the employee on an annual basis. (See Form 2 for sample tuberculin skin test refusal).*

B. Evaluation of staff for active TB

1. Symptomatic staff will be evaluated for active TB by

_____ (insert name or position if
conducted by facility personnel or insert name of contracting agency) . (See
Appendix H.) The staff member will not return to the workplace
until a diagnosis of TB has been excluded or until the staff
member is receiving appropriate therapy and determination
has been made by _____ (insert
name or position if conducted by facility personnel or insert name of contracting agency)
that the staff member is noninfectious.

_____ (insert name or position of
facility staff) will document whether these return to work criteria
have been met.

2. Evaluation and management of staff who have positive PPD results

- a) Newly recognized positive skin tests
 - (1) All staff with newly recognized positive PPD results or PPD conversions will be evaluated promptly for active TB (see Appendix H) by _____ (insert name or
position if conducted by facility personnel or insert name of
contracting agency).

(a) TB Infected (Not Infectious) employees who have a positive skin test, but no evidence of active tuberculosis disease, shall not be restricted from their usual work activities.

(b) Annual, routine chest X-rays are not to be used for screening. Instead, PPD positive staff will be monitored for signs and symptoms by

(insert name or position if conducted by facility personnel or insert name of contracting agency) (see Appendix H).

(2) If symptoms compatible with TB are present, the staff member will be excluded from the workplace until either a diagnosis of active TB is ruled out or active TB is being treated and a determination has been made that the staff member is noninfectious.

(a) Staff with pulmonary or laryngeal TB pose a risk to inmates and other staff while they are infectious, and they will be excluded from the workplace until they are noninfectious.

(insert name or position) will enforce these criteria.

(b) Before the staff member who has TB can return to the workplace, the correctional facility will have documentation from the staff member's health-care provider that the staff member is no longer infectious.

(insert name or position) will determine whether these criteria have been met.

(c) Staff who have TB at sites other than the lung or larynx usually do not need to be excluded from the workplace if a diagnosis of concurrent pulmonary TB has been ruled out.

VII. Inmate Screening and Surveillance

A. Symptom Screening

The most important factors to prevent transmission of *M. tuberculosis* are the early identification of inmates who may have infectious TB, prompt implementation of TB precautions for such inmates, and prompt initiation of effective treatment for those who are likely to have TB.

1. This facility will use written protocols for early identification of inmates with TB symptoms, implementation of TB precautions, and appropriate referral to a collaborating facility where the inmate can be evaluated, treated, and managed. These protocols will be evaluated periodically and revised according to the results of the evaluation.

_____ (insert name of person or position assigned responsibility for TB infection control in the correctional facility) will develop, implement, and enforce the above protocols.

2. Symptom screening shall be done as soon as possible for all new inmates by _____ (name of person or position). Any inmate who has symptoms suggestive of TB (see Appendix I) will immediately be separated from other inmates by _____ (location and method) until a qualified person makes a determination of TB suspect status. The inmate will not return to the general population until TB has been excluded by _____ (insert name or position if conducted by facility personnel or insert name of contracting agency) or until the inmate is receiving appropriate therapy and determination has been made that the inmate is noninfectious by _____ (name of person or position). _____ (insert name or position if conducted by facility personnel or insert name of contracting agency) will determine whether these criteria have been met.

3. All staff will report inmates identified with symptoms suggestive of infectious TB to _____ (insert name of person or position).

B. Skin test screening of long-term correctional inmates

1. *Inmates should be counseled regarding TB and TB infection.*

2. Mantoux tuberculin skin tests (PPDs) will be performed on inmates at the beginning of their incarceration, and repeat PPDs annually on all PPD-negative inmates. In addition, these inmates will be tested whenever they have been exposed to TB and appropriate precautions were not used at the time of exposure.

Tuberculin skin testing will be performed by

_____ (insert name or position if conducted by facility personnel or insert name of contracting agency). Inmates will be skin tested after _____ days in the facility.

3. All PPDs will be read and interpreted by a qualified individual (not the person to whom the test was applied) consistent with the interpretative guidelines established by CDC (see Appendix D)

Tuberculin skin tests will be read and interpreted by

_____ (insert name or position if conducted by facility personnel or insert name of contracting agency).

- a) At the time their test results are read, the inmate will be informed about the interpretation of both positive and negative PPD results. The PPD results will be recorded confidentially in the individual inmate's health record (see Form 1) and in an aggregate database of all inmate PPD results. (See Appendix J for sample inmate database).
- b) Those individuals with a history of a positive PPD result, will be evaluated for signs and symptoms of TB by _____ (insert name or position if conducted by facility personnel or insert name of contracting agency) at _____ (insert location) on an annual basis. In addition, individuals will be reminded of the need for prompt evaluation of any pulmonary or other symptoms suggestive of TB. (See Appendix F).
- c) In any area of the facility where transmission of *M. tuberculosis* is known to have occurred, a problem evaluation will be conducted (see Appendix G).
- d) Inmates who exercise their right to refuse the PPD skin test must be monitored using other acceptable screening methods (such as signs and symptoms). (See Appendix F). *Any refusal should be documented in their record. (See Form 2).*

C. Evaluation and management of inmates who have positive skin test results

1. All inmates with newly recognized positive PPD results or PPD conversions will be evaluated promptly for active TB (see Appendix K) by _____ (insert name, position, or health care facility). If symptoms compatible with TB are present, the inmate will be isolated from other inmates by removal to a negative pressure cell or transferred to a facility with such a room until either
 - a) active TB is ruled out by _____ (insert name, position, or health care facility) or
 - b) active TB is being treated, and a determination has been made that the inmate is noninfectious by _____ (insert name, position, or health care facility). _____ (insert name or position) will document whether these return to general population criteria have been met.

In this facility, isolation will be handled with _____ (onsite negative pressure cell or transfer to other facility). If transfer is necessary, _____ is the receiving facility.

2. Annual, routine chest X-rays are not to be used for screening.
3. Those individuals with a history of a positive PPD result, will be evaluated for signs and symptoms of TB by _____ (insert name or position if conducted by facility personnel or insert name of contracting agency) at _____ (facility name) on an annual basis. In addition, individuals will be reminded of the need for prompt evaluation of any pulmonary or other symptoms suggestive of TB. (See Appendix F).

VIII. Administration of antituberculous medication to inmates

Antituberculosis medication administered to inmates should be given using directly observed therapy (DOT)). This involves a staff member observing and documenting the observation that all doses of medication were actually swallowed by the inmate.

IX. Coordination with the correctional facility and local health department

As soon as an inmate or staff member is known or suspected to have active TB, the inmate or staff member shall be reported to the local health department immediately (Wis. Stats. ss. 252.05). For inmates being released from custody, a discharge plan coordinated with the inmate, the correctional facility, the local health department of inmate's residence, and the inpatient facility (where applicable) will be implemented.

- A. _____ (name or position) is responsible for reporting known or suspected tuberculosis cases to _____ (local health department). (See Form 3: Acute and Communicable Diseases Case Report--DOH4151.)
- B. Correctional facilities and local health departments shall coordinate their efforts to perform appropriate contact investigations on patients and staff who have active TB.
- C. The local health department is responsible for obtaining the results of all AFB-positive sputum smears, cultures positive for *M. tuberculosis* and drug-susceptibility results on *M. tuberculosis* isolates. *The correctional facility should attempt to obtain these results from the local health department as they pertain to staff or inmates of the facility (see voluntary Appendix L).*
- D. *The local health department should assist facilities with planning and implementing various aspects of a TB infection-control program (e.g., surveillance, screening activities, and outbreak investigations). In addition, the Wisconsin Division of Public Health will provide names of experts to assist with the engineering aspects of TB infection control.*
- E. _____ (name or position) is responsible for coordinating the discharge plan with the inmate and local health department for inmates being released from custody with active tuberculosis disease.
- F. *When an inmate with TB infection (positive skin test with no active disease) who is receiving treatment transfers to another facility or is released from custody, the facility will notify the local health department. _____ (name or position) is responsible for notifying the health department.*

X. Engineering Controls

A. General ventilation

The direction of airflow in correctional facilities should be designed, constructed, and maintained so that air flows from clean areas to less-clean

areas and should meet any applicable federal, state, and local requirements. The general ventilation will be maintained on a regular basis.

_____ (name of person or position) is responsible for maintenance of general ventilation system in _____ facility. This maintenance will be performed every _____ (how often--i.e. months).

B. Negative Pressure rooms/cells

This facility _____ (does/ does not) have an onsite TB isolation room.

1. Details, specifications, and maintenance of negative pressure rooms are included in CDC's "Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994"; pages 69-88.

2. _____ (name of person or position) is responsible for assuring the room is at negative pressure. The room(s) will be tested every _____. Testing will be accomplished using _____.
(manometer, smoke trail, anemometer)

XI. Personal Respiratory Protection

A. Staff who provide services to inmates with symptoms suggestive of TB or confirmed infectious TB will wear National Institute of Occupational Safety and Health (NIOSH) approved (for TB) respiratory protection (see Appendix M). Respirators will be worn by:

1. persons entering rooms in which inmates with known or suspected infectious TB are being isolated;
2. persons present during sputum collection and/or cough-inducing or aerosolizing procedures performed on such inmates (see Appendix N). This facility _____ (does / does not) perform these procedures.
3. persons exposed to inmates who are known or suspected to have infectious TB when transporting the inmate in a closed vehicle (e.g., EMTs, security personnel).

XII. Evaluation of skin test conversions and possible transmission of *M. tuberculosis*

The facility will evaluate TB skin test conversions of their staff and inmates and initiate appropriate epidemiologic investigations. Appendix O is the CDC flow chart for investigating skin test conversions. Appendix P details the protocol for such an investigation.

_____ (Name of person or position) will evaluate the TB Control Program on an annual basis.

APPENDIX A

Committee with Supervisory Responsibility for the TB Prevention and Control Program

_____ is designated as the TB Contact Person having lead responsibilities for the committee and overseeing the plan.
(insert name of person and position)

[illegible]

APPENDIX B

FIGURE 1. Protocol for conducting a tuberculosis (TB) risk assessment in a facility.

CDC. Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994. MMWR 1994;43(RR-13):10.

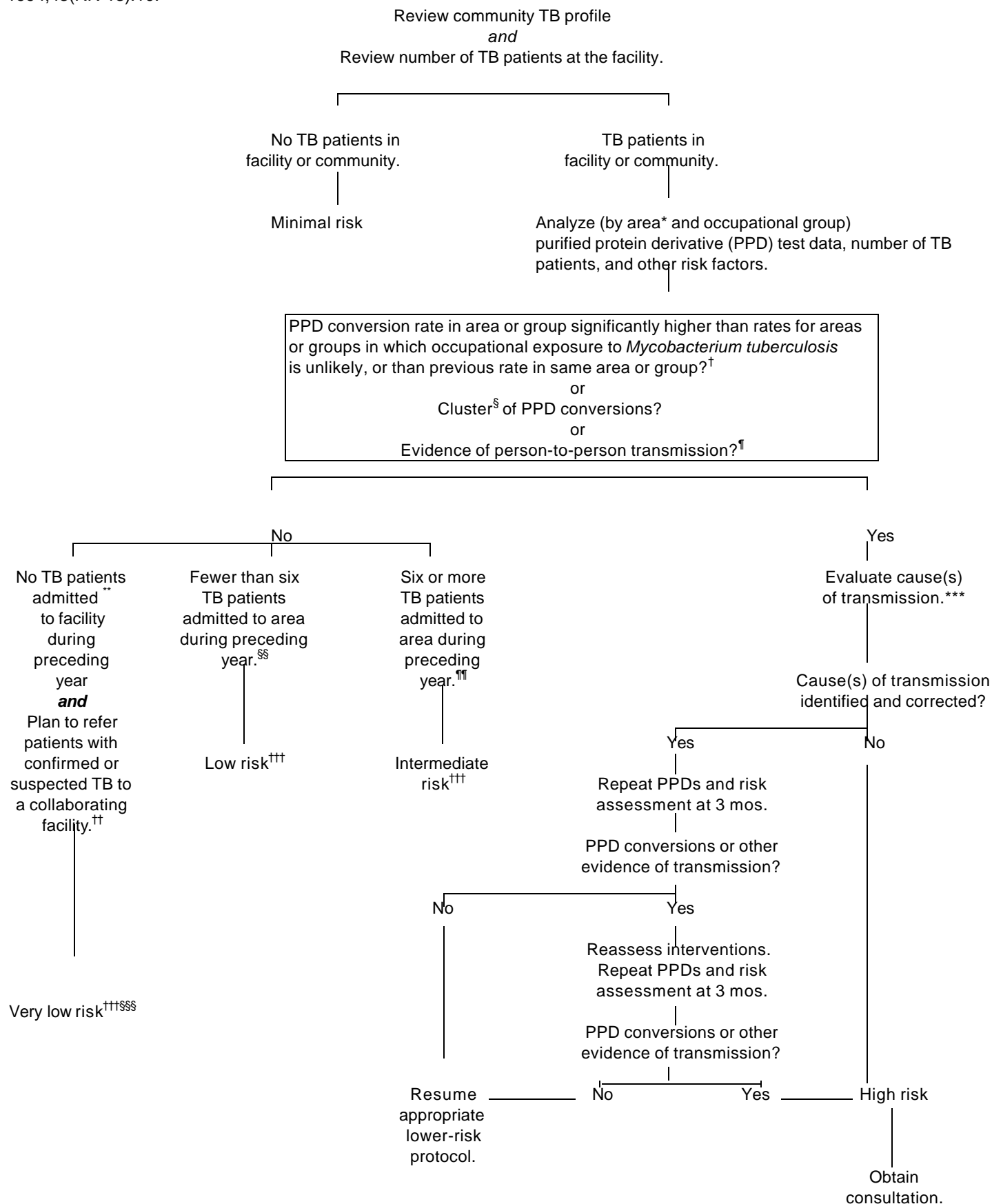


FIGURE 1. Protocol for conducting a tuberculosis (TB) risk assessment in a facility.

- * Area: a structural unit (e.g., a cell block or pod) or functional unit (e.g., booking or health service) in which employees provide services to and share air with a specific inmate population or work with clinical specimens that may contain viable *M. tuberculosis* organisms. The risk for exposure to *M. tuberculosis* in a given area depends on the prevalence of TB in the population served and the characteristics of the environment.
- † With epidemiologic evaluation suggestive of transmission within the facility (see Appendix P).
- § Cluster: two or more PPD skin-test conversions occurring within a 3-month period among employees or inmates in a specific area or group, and epidemiologic evidence suggests in-facility transmission.
- ¶ For example, clusters of *M. tuberculosis* isolates with identical DNA fingerprint (RFLP) patterns or drug-resistance patterns, with epidemiologic evaluation suggestive of nosocomial transmission (see Appendix P).
- ** Does not include inmates identified in symptom screening system and referred to a collaborating facility.
- †† To prevent inappropriate management and potential loss to follow-up of inmates identified in the symptom screening system of a very low-risk facility as having suspected TB, an agreement should exist for referral between the referring and receiving facilities.
- §§ Or, for occupational groups, exposure to fewer than six TB patients for employees in the particular occupational group during the preceding year.
- ¶¶ Or, for occupational groups, exposure to six or more TB patients for employees in the particular occupational group during the preceding year.
- *** See Appendix P.
- ††† Occurrence of drug-resistant TB in the facility or community, or a relatively high prevalence of HIV infection among inmates or employees in the area, may warrant a higher risk rating.
- §§§ If TB cases have been documented in the community but no TB patients have been in the facility during the preceding year, the area can be designated as very low risk.

APPENDIX C

TRAINING LOG FOR CONTROL OF TUBERCULOSIS

Date of Training Session: _____

Location of Session: _____

Length of Session: _____

Name of Trainer(s): _____

Qualifications of Trainer(s): _____

Content Covered:

1. The basic concepts of *M. tuberculosis* transmission, including information concerning the difference between latent TB infection and active TB disease, the signs and symptoms of TB, and the possibility of reinfection. Emphasis shall be given in regard to early identification of inmates with TB.
2. The potential for occupational exposure to inmates who have infectious TB in the facility, including information concerning the prevalence of TB in the community and situations with increased risk for exposure to *M. tuberculosis*.
3. The principles and practices of infection control that reduce the risk for transmission of *M. tuberculosis*, including the written policies and procedures of the facility. Site-specific control measures should be provided to employees working in the areas that require control measures in addition to those of the basic TB infection-control program.
4. For employees who may be using respirators, the principles and practices of respirator use. This includes a discussion of the respirator's capabilities and limitations, the user's responsibility for inspection of equipment prior to use and methods of inspection, storage and maintenance of disposable HEPA or other NIOSH approved respirators, instructions on donning methods, proper fitting and adjustment of respirators, and fit testing specific for the disposable respirator.
5. The purpose of PPD skin testing, the significance of a positive PPD test result, and the importance of participating in the skin-test program.

APPENDIX C

6. The principles of preventive therapy for latent TB infection. These principles include the indications, use, effectiveness, and the potential adverse effects of the drugs.
7. The principles of drug therapy for active TB.
8. The importance of notifying the health department contact person if the employee is diagnosed with active TB so that contact investigation procedures can be initiated.
9. Employee's responsibility to report inmate(s) and/or self with signs and/or symptoms consistent with TB to designated person for follow up.
10. A question and answer session between the trainer(s) and employee(s).

APPENDIX C

Date of Training Session:

Attendance Record:

[illegible]

APPENDIX D

Interpretation of Mantoux Tuberculin Skin Test Results

Generally, a tuberculin skin test reaction of **10 mm or greater** of induration is considered positive for inmates and staff of correctional facilities. However, a reaction of 5 mm or greater is considered positive for

- persons known to have HIV infection
- persons at risk for HIV infection (including persons who inject drugs) but whose HIV status is unknown
- close contacts of a person with infectious TB
- persons with fibrotic changes on chest radiograph consistent with prior TB
- persons with organ transplants and other immunosuppressed persons (receiving the equivalent of $\geq 15\text{mg/d}$ of prednisone for 1 mo or more)

The absence of a reaction to the tuberculin test does not rule out the diagnosis of TB disease or infection. In immunosuppressed persons, delayed-type hypersensitivity responses such as tuberculin reactions may decrease or disappear. This condition, known as anergy, may be caused by many factors, such as

- HIV infection
- overwhelming miliary or pulmonary TB
- severe or febrile illness
- administration of corticosteroids or immunosuppressive drugs
- measles or other viral infections
- Hodgkin's disease
- sarcoidosis
- live-virus vaccination

On average, 10% to 25% of patients who have active TB disease have negative reactions when tested with a tuberculin skin test. Approximately one third of patients with HIV infection may have skin test reactions of less than 5 mm even though they are infected with *M. tuberculosis*.

All HIV-infected persons--whether anergic or not--should receive a chest radiograph and further diagnostic evaluation if indicated.

APPENDIX E

Sample TB Skin Test Analysis – Newly Hired Staff

Purpose - This form should be used to determine

- The number of employees screened for TB during this assessment period
- The number of employees with active disease or with LTBI identified through screening and TB skin tests [PPD]
- The number of employees started on medication for active TB disease or LTBI treatment
- The number of employees completing treatment for TB disease or LTBI treatment

Agency/Facility _____
 TB Control Official _____
 Assessment Period ____/____/____ to ____/____/____
 No. of employees hired during period for whom screening is required _____ †

Action/Finding This Assessment Period	Number	QA	Comment
Total employees <i>screened</i>	a		QA : * All new employees requiring screening should be screened.
Number of employees with documented prior + PPD <i>with</i> verifiable completion of an approved LTBI treatment regimen.	b		Verify undocumented or questionable + PPD reports by applying a new PPD unless contraindicated by severe past reaction. [Persons with doc. of treatment completion should be re-evaluated periodically with vigilance for active disease on an individualized basis, depending upon their risk factors.]
Number of employees with documented prior + PPD <i>without</i> verifiable completion of an approved LTBI treatment regimen.	c		If no approved regimen for LTBI treatment has been completed, a medical evaluation is indicated. (Expect a CXR and LTBI treatment orders unless contraindicated.)
Number of newly hired employees receiving PPD skin testing	d		New employees who will be skin tested periodically: Two-step Mantoux test if no documented negative test in past 12 months. †
Number of newly hired employees with newly identified + PPD results.	e	$(c + e) \div a \times 100 = \text{___} \%$	This is the rate of untreated new employees entering employment with TB disease or LTBI. (Includes untreated newly identified positives plus untreated past positives \div # of new emp. screened this period $\times 100$.)
Number of + PPD employees referred for a medical evaluation	f		All employees with a documented + PPD who have <i>not completed a full regimen of treatment for LTBI</i> should be evaluated. (Expect a CXR to rule out active disease & prescription for LTBI treatment unless either is contraindicated/not indicated.)
Number referred who completed evaluation	g	$g \div f \times 100 = \text{___} \%$	A medical evaluation should be completed for every employee for whom it is indicated. †
Number screened with active disease diagnosis	h	$h \div a \times 100 = \text{___} \%$	Active disease rate for newly hired employees. (Diagnosis of active disease means employee must be medically evaluated to be noninfectious to be in work area with others.)
Number starting treatment for active disease	i	$i \div h \times 100 = \text{___} \%$	All persons with active disease need treatment to protect the health of the public. Contact Investigation required.
Number completing treatment for active disease	j	$j \div h \times 100 = \text{___} \%$	All persons diagnosed with active disease who do not complete treatment are a risk to themselves & to the health of the public (also evaluate: $j \div i \times 100 = \text{___} \%$)
Number of persons screened that were diagnosed as LTBI [k = c + (e – h)]	k	$k \div a \times 100 = \text{___} \%$	Pre-treatment LTBI rate, new emp. (Testing requires follow up evaluation and a commitment to treating those infected, unless contraindicated.)
Number starting LTBI treatment	l	$l \div k \times 100 = \text{___} \%$	Persons with LTBI should complete a treatment regimen unless contraindicated. (Treatment refused, not implemented or not completed creates a potential risk to the person and to the health of the public - Evaluate $(m \div k) \times 100 = \text{___} \%$)
Number completing LTBI treatment	m	$m \div l \times 100 = \text{___} \%$	Persons starting treatment should complete an approved regimen unless contraindicated to avoid progression to active dis. and potential drug resistance

† Follow employer's licensing/certifying requirements as well as any OSHA , Department of Commerce, or other legal requirements.

Sample TB Skin Test Analysis – Continuing Staff

Purpose - This form should be used to determine

- | | |
|---|---|
| <ul style="list-style-type: none"> • The number of continuing employees screened for TB during this assessment period who have a TB skin test [PPD] conversion [Increase of 10mm in 2 yrs.] • The number of employees with active disease or with LTBI identified through screening/skin testing • The number of employees placed on medication for active TB disease or LTBI treatment & the number who complete therapy. | Agency/Facility _____
TB Control Official _____
Assessment Period ____/____/____
No. employees designated to receive TB services _____ |
|---|---|

Agency/Facility _____

TB Control Official _____

Assessment Period / / to / /

No. employees designated to receive screening this period +

Action/Finding This Assessment Period	Number	QA	Comments
Total employees screened	a		*All employees designated for screening/testing during the period should be screened or tested as appropriate.
Number of employees with documented prior + PPD <i>with</i> verifiable completion of an approved LTBI treatment regimen.	b		Verify undocumented or questionable + PPD reports by applying a new PPD unless contraindicated by severe past reaction. (Continuing employees with <i>documented</i> prior + PPD and <i>documentation</i> of a completed regimen can be screened for signs, symptoms & exposures; CXR and/or medical evaluation if indicated by findings, physician diagnosis or if required by employer.) †
Number of employees with documented prior + PPD <i>without</i> verifiable completion of an approved LTBI treatment reg.	c		**If no approved regimen for LTBI treatment has been completed, employee needs individualized on-going evaluation. (Physician or employer may order a CXR and/or sputum testing. Continue promoting LTBI treatment unless contraindicated, according to risk of active disease.) †
Number of continuing employees receiving PPD skin testing	d		Continuing employees who are periodically skin tested may have a single test if a two step was done upon hire and/or documented within 12 months. †
Number of continuing employees with <i>newly identified</i> + PPD results – These are the new converters.	e	$\frac{e \div d \times 100}{=} \%$	This is the rate of continuing employees with newly identified LTBI infection. (Evaluate number of new converters for possible clusters [2 or more in 3 mos. MMWR 10-28-94] who, when, where & with whom they had <i>close</i> contact, assess for poss. exposure/transmission from known/unknown source.).
Number of PPD + employees referred for a medical evaluation [Includes newly + PPD persons (converters) & any past + PPDs with a screening plan indicating med. eval.]	f		All employees with a documented + PPD who have <i>not completed a full regimen of treatment for LTBI</i> need individualized on-going screening. (Physician or employer may order a CXR &/or sputum tests to rule out active disease periodically or based upon sign & symptom screening. Continue promoting LTBI treatment unless contraindicated, according to risk of active disease.)
Number referred who completed evaluation	g	$\frac{g \div f \times 100}{=} \%$	A medical evaluation should be completed for every employee for whom it is indicated. †
Number screened with an active disease diagnosis	h	$\frac{h \div a \times 100}{=} \%$	Active disease rate for continuing employees (Diagnosis of active disease means employee must be medically evaluated as noninfectious to be in work area with others.)
Number starting treatment for active disease	i	$\frac{i \div h \times 100}{=} \%$	All persons with active disease need treatment to restore their health and to protect the health of the public. Contact investigation required.
Number completing treatment for active disease	j	$\frac{j \div h \times 100}{=} \%$	All persons with active disease who do not complete treatment are a risk to themselves and to the health of the public. (Also evaluate: $j \div i \times 100 = __\% -$ do those starting also complete?)
Number screened with LTBI diagnosis [k = c + (e – h)]	k	$\frac{k \div a \times 100}{=} \%$	Pre-treatment LTBI rate, continuing employees. (Testing requires follow up evaluation and a commitment to treating those who are infected, unless contraindicated.)
Number starting LTBI treatment	l	$\frac{l \div k \times 100}{=} \%$	Persons with LTBI without documented treatment completion should receive medical treatment unless contraindicated. (Treatment refusal creates a potential for risk to the person and to the health of the public.)
Number completing LTBI treatment	m	$\frac{(m \div l) \times 100}{=} \%$	Persons beginning treatment should complete an approved regimen unless contraindicated to avoid progression to active disease and potential drug resistance.

† Follow employer's licensing/certifying requirements as well as any OSHA, Department of Commerce, or other legal requirements.

APPENDIX F

QUESTIONNAIRE FOR EVALUATION OF SIGNS AND SYMPTOMS OF TB IN CORRECTIONAL STAFF AND INMATES

This form will be used for the following: 1) those who refuse PPD skin testing; 2) those with a history of a positive PPD skin test; or 3) those with a history of active TB disease.

Name _____

☐ Employee ☐ Inmate

History

☐ Refuses PPD Skin Testing

☐ TB Infection

* Positive Mantoux Skin Test ____ Yes ____ No

Date test administered/read: _____ / _____

Result of skin test: _____ mm

* Chest X-ray ____ Yes ____ No

Date done: _____

Findings: _____

* Preventive Therapy ____ Yes ____ No

If yes, list medication, dosage, duration of therapy, and dates received:

☐ TB Active Disease

* Positive Mantoux Skin Test ____ Yes ____ No

Date test administered/read: _____ / _____

Result of skin test: _____ mm

* Chest X-ray ____ Yes ____ No

Date done: _____

Findings: _____

* Diagnostic Microbiology (sputum specimen)

Date/Findings: _____ / _____

_____ / _____

_____ / _____

* Treatment

List medication, dosage, duration of therapy, and dates received:

Check if individual has experienced any of the following in the past year:

- | | |
|---|--|
| <input type="checkbox"/> unanticipated weight loss | <input type="checkbox"/> coughing up sputum (phlegm from deep in the lungs) or blood |
| <input type="checkbox"/> night sweats | <input type="checkbox"/> loss of appetite |
| <input type="checkbox"/> persistent cough (≥ 3 weeks) | <input type="checkbox"/> pain in the chest when breathing or coughing |
| <input type="checkbox"/> fatigue | |
| <input type="checkbox"/> fever | |
| <input type="checkbox"/> chills | |

Comments: _____

_____ Signature of Interviewer	_____ Title	_____ Date
-----------------------------------	----------------	---------------

For inmate or employee:

The above listed signs/symptoms of TB have been reviewed with me. I understand that I must immediately report experiencing any of these signs or symptoms, should they occur. I have received education regarding tuberculosis disease and the risk for developing active tuberculosis.

_____ Signature	_____ Date
--------------------	---------------

APPENDIX G

Problem evaluation

Several situations may indicate a need for further epidemiologic investigation. These include, but are not limited to:

- the occurrence of skin test conversions or TB disease in staff members
- situations in which inmates or staff members with TB disease are not promptly identified and isolated, thus exposing other persons in the facility to *M. tuberculosis*.

The general objectives of these investigations are as follows:

- to determine the likelihood that transmission of and infection with *M. tuberculosis* has occurred in the facility
- to determine the extent to which *M. tuberculosis* has been transmitted
- to identify those persons who have been exposed and infected, enabling them to receive appropriate clinical management and treatment
- to identify factors that could have contributed to transmission and to implement appropriate interventions
- to evaluate the effectiveness of any interventions that are implemented and to assure that exposure to and transmission of *M. tuberculosis* have been terminated.

The exact circumstances of these situations are likely to vary considerably, and the associated epidemiologic investigations should be tailored to the individual circumstances. For a more detailed example of investigating PPD conversions, refer to Appendix O.

APPENDIX H

Evaluation of Employees who have Positive PPD Test Results or Active TB

All employees with newly recognized positive PPD test results or PPD test conversions should be evaluated promptly for active TB. This evaluation should include a clinical examination and a chest x-ray. If the history, clinical examination, or chest x-ray is compatible with active TB, additional tests should be performed. Employees with a positive PPD or PPD conversion who do not have active TB should be evaluated for treatment of latent TB infection.

Diagnostic Procedures for TB Infection and Disease

A diagnosis of TB may be considered for any individual who has a persistent cough (i.e., a cough lasting ≥ 3 weeks) or other signs or symptoms compatible with TB (e.g., bloody sputum, night sweats, weight loss, anorexia, or fever).

Chest Radiography

Persons who have positive skin test results or symptoms suggestive of TB should be evaluated with a chest x-ray. Radiographic abnormalities that strongly suggest active TB include upper lobe infiltration, particularly if cavitation is seen, and patchy or nodular infiltrates in the apical or subapical posterior upper lobes or the superior segment of the lower lobe. If abnormalities are noted, or if the patient has signs or symptoms suggestive of extrapulmonary TB, additional diagnostic tests should be conducted.

The radiographic presentation of pulmonary TB in HIV-infected patients may be unusual. Typical apical cavitary disease is less common among such patients. They may have infiltrates in any lung zone, a finding that is often associated with mediastinal and/or hilar adenopathy, or rarely they may have a normal chest x-ray.

Bacteriology

Smear and culture examination of at least three sputum specimens collected on different days is the main diagnostic procedure for pulmonary TB. Sputum smears that fail to demonstrate acid fast bacilli (AFB) do not exclude the diagnosis of TB.

Specimens for smear and culture should contain an adequate amount of expectorated sputum but not much saliva. If a diagnosis of TB cannot be established from sputum, a bronchoscopy may be necessary.

Investigating cases of active TB in Employees

If an employee develops active TB, the following steps will be taken in cooperation with the local health department:

- The case will be evaluated epidemiologically, in a manner similar to PPD test conversions in employees, to determine the likelihood that it resulted from occupational transmission and to identify possible causes and implement appropriate interventions if the evaluation suggests such transmission.
- Contacts of the employee (e.g., other employees, inmates, visitors, and others who have had intense exposure to the employee) will be identified and evaluated for TB infection and disease.

Treatment for Latent TB Infection

Employees with positive PPD test results should be evaluated for treatment of latent TB infection, especially if they a) are recent converters, b) are close contacts of persons who have active TB, c) have a medical condition that increases the risk for TB, d) have HIV infection, or e) inject non-prescription drugs.

APPENDIX I

Inmate intake TB screening tool

Assessment questions	Evaluation	YES	NO
<u>TB Symptoms</u> Do you currently have a cough that has lasted 3 weeks or longer? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you bring up anything when you cough? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you cough up blood? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you sweat at night, enough to soak the sheets? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you have a fever or chills? <input type="checkbox"/> Yes <input type="checkbox"/> No Have you lost weight recently (10 pounds or more) without trying? <input type="checkbox"/> Yes <input type="checkbox"/> No Do you have chest pain? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are there marks in 2 or more “Yes” boxes under TB Symptoms? If so, mark the “YES” column at right, otherwise mark the “NO” column.		
<u>Risk Factors</u> Have you been around someone who was sick with tuberculosis? <input type="checkbox"/> Yes <input type="checkbox"/> No Were you born outside of the United States? <input type="checkbox"/> Yes <input type="checkbox"/> No If yes, which country? _____ Do you shoot drugs? <input type="checkbox"/> Yes <input type="checkbox"/> No Have you ever considered yourself to be homeless? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are there marks in 1 or more “Yes” boxes under Risk Factors? If so, mark the “YES” column at right, otherwise mark the “NO” column.		
<u>Past History</u> Have you ever had a positive TB skin test ? <input type="checkbox"/> Yes <input type="checkbox"/> No Explanation: A test using a needle in the skin on the underside of the arm which caused a bump after 2 days If yes: Where (city, state, clinic, or facility) _____ When _____ Have you ever been told you had tuberculosis? <input type="checkbox"/> Yes <input type="checkbox"/> No	Are there marks in 1 or more “Yes” boxes under Past History? If so, mark the “YES” column at right, otherwise mark the “NO” column.		
<u>Observation</u> (comments) (e.g., Does your observation match the inmate’s report? Did the inmate cough during the booking process? Did the inmate appear underweight? Etc.)	Does the inmate appear ill, consistent with the TB symptoms in the symptom section? If yes, mark the “YES” column at right.		

SAMPLE
4/10/02

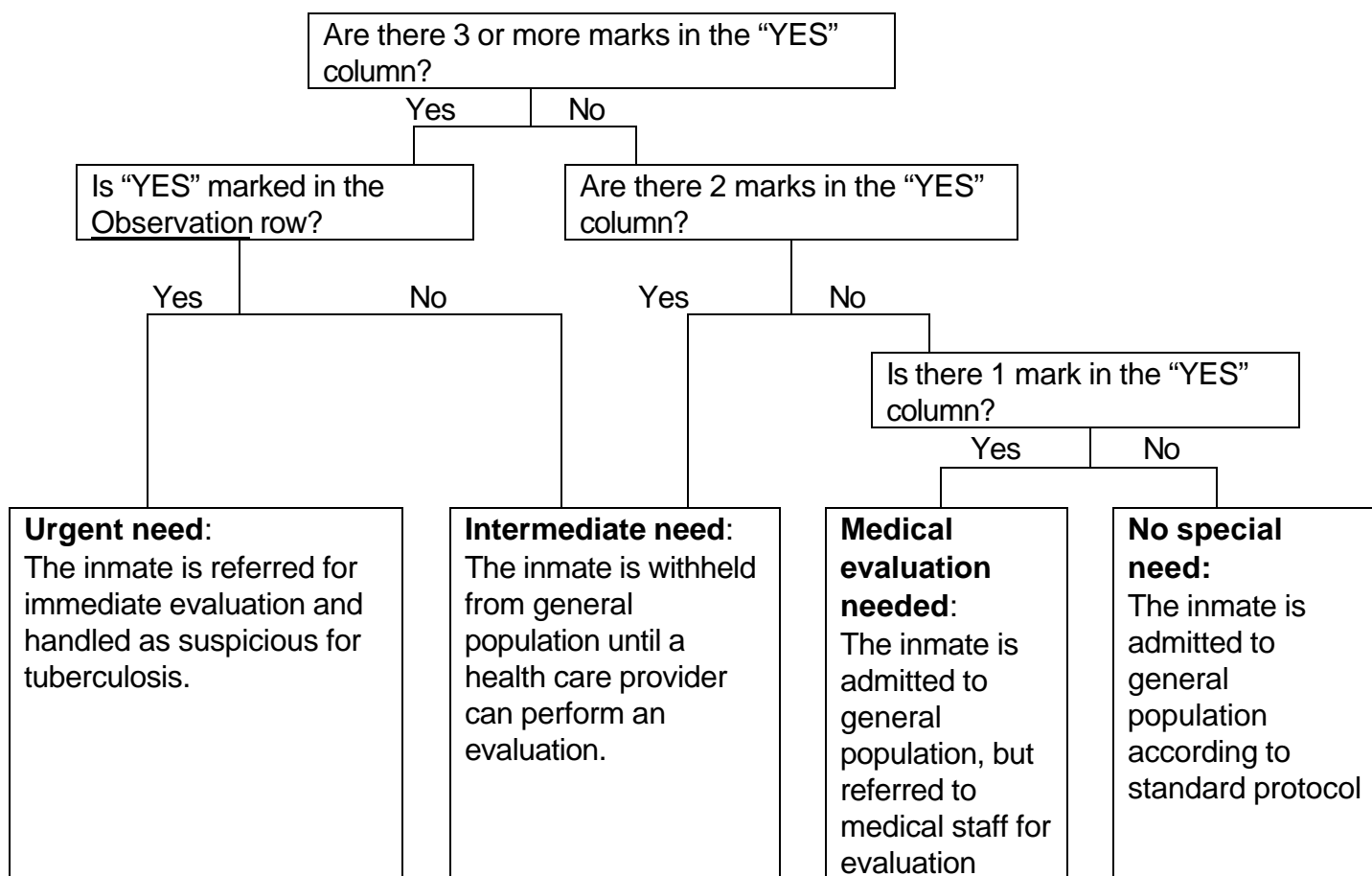
SAMPLE

SAMPLE

APPENDIX I

Instructions for using the inmate intake TB screening tool

The booking officer asks the inmate the assessment questions listed in column 1 (previous page). The officer then responds to the evaluation questions in column 2 by marking an "x" in either the "Yes" or "No" columns as appropriate. The inmate is categorized according to need based on the number of marks in the "Yes" column.



APPENDIX J

Sample TB Skin Test Analysis – New Inmates

Purpose - This form should be used to determine

- The number of inmates screened for TB during this assessment period
- The number of inmates with active disease or with LTBI identified through screening and TB skin tests [PPD]
- The number of inmates started on medication for active TB disease or LTBI treatment
- The number of inmates completing treatment for TB disease or LTBI treatment

Agency/Facility _____
 TB Control Official _____
 Assessment Period ____/____/____ to ____/____/____
 No. of inmates hired during period for whom screening is required _____ †

Action/Finding This Assessment Period	Number	QA	Comment
Total inmates <i>screened</i>	a		QA : * All new inmates requiring screening should be screened.
Number of inmates with documented prior + PPD <i>with</i> verifiable completion of an approved LTBI treatment regimen.	b		Verify undocumented or questionable + PPD reports by applying a new PPD unless contraindicated by severe past reaction. [Persons with doc. of treatment completion should be re-evaluated periodically with vigilance for active disease on an individualized basis, depending upon their risk factors.]
Number of inmates with documented prior + PPD <i>without</i> verifiable completion of an approved LTBI treatment regimen.	c		If no approved regimen for LTBI treatment has been completed, a medical evaluation is indicated. (Expect a CXR and LTBI treatment orders unless contraindicated.)
Number of new inmates receiving PPD skin testing	d		New inmates who will be skin tested periodically: Two-step Mantoux test if no documented negative test in past 12 months. †
Number of new inmates with newly identified + PPD results.	e	$(c + e) \div a \times 100 = \text{ } \%$	This is the rate of untreated new inmates entering the jail with TB disease or LTBI. (Includes untreated newly identified positives plus untreated past positives \div # of new inmates screened this period $\times 100$.)
Number of + PPD inmates referred for a medical evaluation	f		All inmates with a documented + PPD who have <i>not completed a full regimen of treatment for LTBI</i> should be evaluated. (Expect a CXR to rule out active disease & prescription for LTBI treatment unless either is contraindicated/not indicated.)
Number referred who completed evaluation	g	$g \div f \times 100 = \text{ } \%$	A medical evaluation should be completed for every inmate for whom it is indicated. †
Number screened with active disease diagnosis	h	$h \div a \times 100 = \text{ } \%$	Active disease rate for new inmates. (Diagnosis of active disease means inmate must be medically evaluated to be noninfectious to be general population.)
Number starting treatment for active disease	i	$i \div h \times 100 = \text{ } \%$	All persons with active disease need treatment to protect the health of the public. Contact Investigation required.
Number completing treatment for active disease	j	$j \div h \times 100 = \text{ } \%$	All persons diagnosed with active disease who do not complete treatment are a risk to themselves & to the health of the public (also evaluate: $j \div i \times 100 = \text{ } \%$)
Number of persons screened that were diagnosed as LTBI [k = c + (e – h)]	k	$k \div a \times 100 = \text{ } \%$	Pre-treatment LTBI rate, new inmates (Testing requires follow up evaluation and a commitment to treating those infected, unless contraindicated.)
Number starting LTBI treatment	l	$l \div k \times 100 = \text{ } \%$	Persons with LTBI should complete a treatment regimen unless contraindicated. (Treatment refused, not implemented or not completed creates a potential risk to the person and to the health of the public - Evaluate $(m \div k) \times 100 = \text{ } \%$)
Number completing LTBI treatment	m	$m \div l \times 100 = \text{ } \%$	Persons starting treatment should complete an approved regimen unless contraindicated to avoid progression to active disease and potential drug resistance

† Follow licensing/certifying requirements as well as any OSHA , Department of Commerce, or other legal requirements.

Sample TB Skin Test Analysis – Continuing Inmates

Purpose - This form should be used to determine

- The number of continuing inmates screened for TB during this assessment period who have a TB skin test [PPD] conversion [Increase of 10mm in 2 yrs.]
- The number of inmates with active disease or with LTBI identified through screening/skin testing
- The number of inmates placed on medication for active TB disease or LTBI treatment & the number who complete therapy.

Agency/Facility _____
 TB Control Official _____
 Assessment Period ____/____/____ to ____/____/____
 No. inmates designated to receive screening this period ____ †

Action/Finding This Assessment Period	Number	QA	Comments
Total inmates screened	a		*All inmates designated for screening/testing during the period should be screened or tested as appropriate.
Number of inmates with documented prior + PPD <i>with</i> verifiable completion of an approved LTBI treatment regimen.	b		Verify undocumented or questionable + PPD reports by applying a new PPD unless contraindicated by severe past reaction. (Continuing inmates with <i>documented</i> prior + PPD and <i>documentation</i> of a completed regimen can be screened for signs, symptoms & exposures; CXR and/or medical evaluation if indicated by findings, physician diagnosis.) †
Number of inmates with documented prior + PPD <i>without</i> verifiable completion of an approved LTBI treatment reg.	c		**If no approved regimen for LTBI treatment has been completed, inmate needs individualized on-going evaluation. (Physician may order a CXR and/or sputum testing. Continue promoting LTBI treatment unless contraindicated, according to risk of active disease.) †
Number of continuing inmates receiving PPD skin testing	d		Continuing inmates who are periodically skin tested may have a single test if a two-step was done upon admission and/or documented within 12 months. †
Number of continuing inmates with <i>newly identified</i> + PPD results – These are the new converters.	e	$\frac{e \div d \times 100}{= \text{ } \%}$	This is the rate of continuing inmates with newly identified LTBI infection. (Evaluate number of new converters for possible clusters [2 or more in 3 mos. MMWR 10-28-94] who, when, where & with whom they had <i>close</i> contact, assess for poss. exposure/transmission from known/unknown source.).
Number of PPD + inmates referred for a medical evaluation [Includes newly + PPD persons (converters) & any past + PPDs with a screening plan indicating med. eval.]	f		All inmates with a documented + PPD who have <i>not completed a full regimen of treatment for LTBI</i> need individualized on-going screening. (Physician may order a CXR &/or sputum tests to rule out active disease periodically or based upon sign & symptom screening. Continue promoting LTBI treatment unless contraindicated, according to risk of active disease.)
Number referred who completed evaluation	g	$\frac{g \div f \times 100}{= \text{ } \%}$	A medical evaluation should be completed for every inmate for whom it is indicated. †
Number screened with an active disease diagnosis	h	$\frac{h \div a \times 100}{= \text{ } \%}$	Active disease rate for continuing inmates (Diagnosis of active disease means inmate must be medically evaluated as noninfectious to be general population.)
Number starting treatment for active disease	i	$\frac{i \div h \times 100}{= \text{ } \%}$	All persons with active disease need treatment to restore their health and to protect the health of the public. Contact investigation required.
Number completing treatment for active disease	j	$\frac{j \div h \times 100}{= \text{ } \%}$	All persons with active disease who do not complete treatment are a risk to themselves and to the health of the public. (Also evaluate: $j \div i \times 100 = \text{ } \%$ - do those starting also complete?)
Number screened with LTBI diagnosis [k = c + (e – h)]	k	$\frac{k \div a \times 100}{= \text{ } \%}$	Pre-treatment LTBI rate, continuing inmates. (Testing requires follow up evaluation and a commitment to treating those who are infected, unless contraindicated.)
Number starting LTBI treatment	l	$\frac{l \div k \times 100}{= \text{ } \%}$	Persons with LTBI without documented treatment completion should receive medical treatment unless contraindicated. (Treatment refusal creates a potential for risk to the person and to the health of the public.)
Number completing LTBI treatment	m	$\frac{(m \div l) \times 100}{= \text{ } \%}$	Persons beginning treatment should complete an approved regimen unless contraindicated to avoid progression to active disease and potential drug resistance.

† Follow licensing/certifying requirements as well as any OSHA, Department of Commerce, or other legal requirements

APPENDIX K

Evaluation of Inmates who have Positive PPD Test Results or Active TB

All inmates with newly recognized positive PPD test results or PPD test conversions should be evaluated promptly for active TB. This evaluation should include a clinical examination and a chest x-ray. If the history, clinical examination, or chest x-ray is compatible with active TB, additional tests should be performed. HIV counseling and testing is strongly recommended for persons in whom TB is suspected. Inmates who do not have active TB should be evaluated for treatment of latent TB infection.

Diagnostic Procedures for TB Infection and Disease

A diagnosis of TB may be considered for any individual who has a persistent cough (i.e., a cough lasting ≥ 3 weeks) or other signs or symptoms compatible with TB (e.g., bloody sputum, night sweats, weight loss, anorexia, or fever).

Chest Radiography

Persons who have positive skin-test results or symptoms suggestive of TB should be evaluated with a chest x-ray regardless of PPD test results. Radiographic abnormalities that strongly suggest active TB include upper lobe infiltration, particularly if cavitation is seen, and patchy or nodular infiltrates in the apical or subapical posterior upper lobes or the superior segment of the lower lobe. If abnormalities are noted, or if the patient has symptoms suggestive of extrapulmonary TB, additional diagnostic tests should be conducted.

The radiographic presentation of pulmonary TB in HIV-infected patients may be unusual. Typical apical cavitory disease is less common among such patients. They may have infiltrates in any lung zone, a finding that is often associated with mediastinal and/or hilar adenopathy, or rarely they may have a normal chest x-ray.

Bacteriology

Smear and culture examination of at least three sputum specimens collected on different days is the main diagnostic procedure for pulmonary TB. Sputum smears that fail to demonstrate AFB do not exclude the diagnosis of TB.

Specimens for smear and culture should contain an adequate amount of expectorated sputum but not much saliva. If a diagnosis of TB cannot be established from sputum, a bronchoscopy may be necessary.

Preventive Therapy for Latent TB Infection

Inmates with positive PPD test results should be evaluated for treatment of latent TB infection, especially if they a) are recent converters, b) are close contacts of persons who

have active TB, c) have a medical condition that increases the risk for TB, d) have HIV infection, or e) inject non-prescription drugs.

Investigating cases of active TB in Inmates

If an inmate develops active TB, the following steps will be taken in cooperation with the local health department:

- The case will be evaluated epidemiologically, in a manner similar to PPD test conversions in employees or inmates, to determine the likelihood that it resulted from transmission within the facility and to identify possible causes and implement appropriate interventions if the evaluation suggests such transmission.
- Contacts of the inmate (e.g., other inmates, employees, visitors, and others who have had intense exposure to the employee) will be identified and evaluated for TB infection and disease.

APPENDIX L

DRUG SUSCEPTIBILITY PROFILE FOR ALL TB CASES

Place one of the following abbreviations in the column for all first and second line drugs for each case ID:

S = Susceptible

R = Resistant

- = Not Known

[illegible]

APPENDIX M

D R A F T
SAMPLE WRITTEN

**RESPIRATORY PROTECTION PROGRAM FOR
DISPOSABLE RESPIRATORS WHICH ARE NIOSH
APPROVED FOR PROTECTION AGAINST
TUBERCULOSIS**

Wisconsin Department of Health and Family Services
Division of Health
Bureau of Public Health
Section of Occupational Health

OSHA Consultation Program

RESPIRATORY PROTECTION PROGRAM
FOR DISPOSABLE RESPIRATORS WHICH ARE
NIOSH APPROVED FOR PROTECTION AGAINST TUBERCULOSIS

(company name)

This respiratory protection program establishes the use and maintenance of respiratory protection equipment which is needed to reduce employee exposure to airborne tuberculosis.

The administration of the respiratory protection program is the responsibility of _____.

Responsibilities include:

- A. IDENTIFICATION AND LOCATION OF POTENTIAL TB EXPOSURES.
 - B. RESPIRATOR SELECTION.
 - C. MEDICAL EVALUATION OF RESPIRATOR USERS.
 - D. EMPLOYEE TRAINING AND RESPIRATOR FIT TESTING.
 - E. MAINTENANCE AND STORAGE OF RESPIRATORS.
 - F. EVALUATION OF OVERALL RESPIRATOR PROGRAM.
- A. Identification and location of potential TB exposures. Disposable respirators which are NIOSH approved for protection against tuberculosis must be worn under the following circumstances:

When employees enter rooms housing individuals with suspected or confirmed infectious TB disease.

When employees perform high hazard procedures on individuals who have suspected or confirmed TB disease. Examples of high hazard procedures include aerosolized medication (e.g., pentamidine) treatment, bronchoscopy, sputum induction, endotracheal intubation and suctioning procedures, and autopsies.

When emergency-medical response personnel or others must transport, in a closed vehicle, an individual with suspected or confirmed TB disease.

NOTE: If your facility is not involved in some of these activities, line them out and say Not Applicable (NA). If you are a home health agency and you will be wearing respirators for home visits to known or suspect cases, you may want to elaborate on the first circumstance. If you only perform one of the high hazard procedures in your facility, line out the others to tailor to your facility.

B. Respirator Selection.

All respirators will be selected based on the criteria established by current OSHA regulations. Only respirators having NIOSH approval for protection against tuberculosis shall be used. Currently the only disposable respirators accepted by OSHA for protection against tuberculosis are those which meet the N95 criteria or greater.

C. Medical Evaluation of Respirator Users.

Prior to assignment to any position at which a respirator is used, a medical evaluation of the employee's physical ability to work while wearing a respirator is necessary. The type of medical evaluation needed is at the discretion of the physician. An evaluation will be done on an annual basis. If a change in the employee's medical condition occurs, a medical reevaluation shall be performed.

Appendix A and the respirator to be worn will be sent along with the employee for the evaluation. Physician's approval, using Appendix A, will be necessary before the employee can use the respirator.

D. Employee Training and Respirator Fit Testing.

Training in the use and limitations of respirators will be provided to all respirator users. Initial training and refresher training will be conducted by _____. Appendix B serves as a guide for the training as well as a documentation of training dates. During training, employees will be advised of the potential hazards associated with exposure to TB.

Fit testing will be performed by _____ as part of the employee training program and periodically thereafter. A record of the tests will be maintained using Appendix C.

E. Maintenance and Storage of Respirators.

Maintenance of respirators will be the responsibility of each individual employee.

Respirators will be issued to individual workers.

Procedures for maintenance and storage are outlined in Appendix D.

F. Respirator Program Evaluation.

The overall evaluation of the disposable respirator program will be conducted by _____ on an annual basis, or more often if necessary. This evaluation will include inspection of records contained in the appendices, observation of user proficiency, and random inspection of respirators for cleanliness, deterioration, proper selection and proper storage. A record of the evaluation will be recorded using Appendix E.

G. Established

(Date)

Executive Officer

**RESPIRATORY PROTECTION PROGRAM
APPENDIX A**

Dear Dr.

It is our company policy that before a worker can be required to wear a disposable respirator on the job, a medical evaluation is needed to determine if the worker is capable of wearing the protective device.

The following pertains to the type of work performed and the respirator used.

Employee: _____	Respirator: _____
Date: _____	Job Description: _____
Estimated Respirator Use Time: _____	_____
_____	Work
Activity: _____	
Air Contaminant Exposed To: tuberculosis	

Upon completion of the evaluation, please complete the following and return to me.

Based on my evaluation, _____
(employee name)

/___/ Has no medical condition which would be aggravated by or interfere with
the use of respirator protection.

/___/ Can wear a respirator with the following restrictions:

/___/ Should not be required to wear respiratory protection.

Doctor's signature _____

Date _____

Thank You,

**RESPIRATORY PROTECTION PROGRAM
APPENDIX B**

Respirator User Training and Education

1. The user is instructed in the hazards of TB during annual TB training.
2. Instruction will include a discussion of the respirator's capabilities and limitations.
3. A detailed discussion of the user's responsibility for inspection of equipment prior to use and methods of inspection will be included. Each user will have a respirator during this part of training.
4. Instruction and training will include storage and maintenance of disposable respirators. [*Disposable respirators cannot be cleaned.*]
5. Instructions on donning methods, proper fitting and adjustment of the respirators will be given. Each user will then don the respirator in an atmosphere of normal air, prior to a fit testing exercise.
6. Fit testing specific for the disposable respirator will be given.
(see Appendix C)
7. A record of employees and the dates and types of initial training and subsequent refresher training will be maintained.

TRAINING RECORD

<u>Name</u>	<u>Department</u>	<u>Respirator Type</u>	<u>Date</u>
-------------	-------------------	------------------------	-------------

<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>
<hr/>	<hr/>	<hr/>	<hr/>

(Signature of Trainer)

**RESPIRATORY PROTECTION PROGRAM
APPENDIX C**

Respirator Qualitative Fit Test

Name: _____

Date of Test: _____

Type and Brand of Respirator _____

NIOSH Approval No. _____

Evaluator: _____

Most comfortable respirator selected?

Employee is shown how to don and adjust respirator for proper fit:

(check one)
OK or NO

Position of mask on nose, chin and cheek

☐ ☐

Room for eye protection

☐ ☐

Room to talk

☐ ☐

Proper fit observed by evaluator

☐ ☐

Employee dons and wears respirator for 5 minutes

☐ ☐

The positive pressure test and negative pressure test procedure will be followed according to the manufacturer's fit check instructions.

☐ ☐

Fit Test method used (e.g., irritant smoke, saccharine) (*circle one*)

1. Normal breathing

☐ ☐

2. Deep breathing

☐ ☐

3. Turning head side to side

☐ ☐

4. Moving head up and down

☐ ☐ ☐

5. Talking

☐ ☐

6. Grimacing

☐ ☐

7. Bending over

☐ ☐

8. Normal breathing

☐ ☐

Comments:

**RESPIRATORY PROTECTION PROGRAM
APPENDIX D**

Maintenance and Storage

Storage

When the respirator is not in use, it should be placed in an area protected from damage and contamination. Respirators should be stored in a breathable container to inhibit the growth of mold. Avoid distorting the respirator during storage. (*examples include plastic breathable vegetable, ziplock bags or paper bags*)

Inspection of Respirator

The respirator must be inspected prior to each use to insure that it will function properly. Examine each part of the respirator for defects. Discard the respirator if defects are found.

Check for the following:

Distorted or badly worn parts.

Straps that have lost elasticity, are cut, or otherwise damaged.

Damage such as tears, holes, etc.

Any other condition that shows the respirator will not give adequate protection.

Disposable respirators cannot be cleaned.

**RESPIRATORY PROTECTION PROGRAM
APPENDIX E**

Respirator Program Evaluation

1. Are records complete and up to date? Yes _____ No _____
If no, what action has been taken to improve future performance?

—

—

2. Are employees wearing the proper respirators? Yes _____ No _____
If no, what action has been taken to ensure that employees wear appropriate respirators?

3. Have employees who wear respirators had a medical evaluation and were they fit tested? Yes _____ No _____
If no, what is being done to correct the situation?

—

—

4. Have all employees completed their initial or refresher respirator training?
Yes _____ No _____
If no, what is being done to complete training?

5. Do employees who have completed training understand limitations, use and inspection of respirators?
Yes _____ No _____

If no, what improvements in the training program are being implemented?

Date: -----

Signature:

APPENDIX N

Cough-Inducing and Aerosol-Generating Procedures

General Guidelines

Procedures that involve instrumentation of the lower respiratory tract or induce coughing can increase the likelihood of droplet nuclei being expelled into the air. These cough-inducing procedures include endotracheal intubation and suctioning, diagnostic sputum induction, aerosol treatments (e.g., pentamidine therapy), and bronchoscopy. Other procedures that can generate aerosols (e.g., irrigation of tuberculous abscesses, homogenizing or lyophilizing tissue, or other processing of tissue that may contain tubercle bacilli) are also covered by these recommendations.

- Cough-inducing procedures should not be performed on patients who may have infectious TB unless the procedures are absolutely necessary and can be performed with appropriate precautions.
- All cough-inducing procedures performed on patients who may have infectious TB should be performed using local exhaust ventilation devices (e.g., booths or special enclosures) or, if this is not feasible, in a room that meets the ventilation requirements for TB isolation.
- Employees should wear respiratory protection when present in rooms or enclosures in which cough-inducing procedures are being performed on patients who may have infectious TB.
- After completion of cough-inducing procedures, patients who may have infectious TB should remain in their isolation rooms or enclosures and not return to common waiting areas until coughing subsides. They should be given tissues and instructed to cover their mouths and noses with the tissues when coughing. If TB patients must recover from sedatives or anesthesia after a procedure (e.g., after a bronchoscopy), they should be placed in separate isolation rooms (and not in recovery rooms with other patients) while they are being monitored.
- Before the booth, enclosure, or room is used for another patient, enough time should be allowed to pass for at least 99% of airborne contaminants to be removed. This time will vary according to the efficiency of the ventilation or filtration used. [Centers for Disease Control and Prevention. Guidelines for preventing the transmission of *Mycobacterium tuberculosis* in health-care facilities, 1994. MMWR 1995;43(No. RR-13):72.]

Special considerations for bronchoscopy.

- If performing bronchoscopy in positive-pressure rooms (e.g., operating rooms) is unavoidable, TB should be ruled out as a diagnosis before the procedure is performed. If the bronchoscopy is being performed for the purpose of diagnosing pulmonary disease and that diagnosis could include TB, the procedure should be performed in a room that meets TB isolation ventilation requirements.

Special considerations for the administration of aerosolized pentamidine.

- Patients should be screened for active TB before prophylactic therapy with aerosolized pentamidine is initiated. Screening should include obtaining a medical history and performing skin testing and chest radiography.
- Before each subsequent treatment with aerosolized pentamidine, patients should be screened for symptoms of TB (e.g., development of a productive cough). If such symptoms are identified, a diagnostic evaluation for TB should be initiated.
- Patients who have suspected or confirmed active TB should take, if clinically practical, oral prophylaxis for *P.carinii* pneumonia.

APPENDIX O

Protocol for investigating purified protein derivative (PPD)-tuberculin skin-test conversions in correctional facilities

CDC. Guidelines for Preventing the Transmission of *Mycobacterium tuberculosis* in Health-Care Facilities, 1994. MMWR 1994;43(RR-13):44.

PPD test conversion

1. Evaluate individual for active tuberculosis (TB).
2. Determine need for treatment of latent TB infection or curative therapy.
3. Obtain history of possible TB exposure.
4. Notify public health department.

Probable exposure to *Mycobacterium tuberculosis* outside of facility?

No

Yes

No further investigation necessary in facility.

Recognized exposure to *M. tuberculosis* in facility?

Yes

No

1. Identify and evaluate contacts of the suspected source patient..
2. Evaluate possible reasons for exposure and transmission.
3. Implement interventions.
4. Repeat PPDs and evaluation after 3 mos.

Review laboratory and infection control records to identify patients who have TB.

Match patients who have TB and HCW PPD conversion, by time and location.

Probable source patient(s) identified?

Yes

No

1. Review PPD screening results of employees and inmates in same area .
2. Consider additional PPD testing.

Other PPD conversions detected?

Yes

No

Transmission in the facility more likely: evaluate patient detection process, TB infection control practices, and engineering controls.

Transmission in the facility less likely: terminate investigation.

Potential problem identified?

Yes

No

1. Implement intervention(s) to correct problem.
2. Repeat PPDs and evaluation after 3 mos.

PPD conversions or other evidence of transmission?

No

Yes

1. Reassess possible reasons for exposure and transmission.
2. Reassess interventions.
3. Repeat PPDs and evaluation after 3 mos.

PPD conversions or other evidence of transmission?

No

Yes

Terminate Investigation

1. Implement high-risk protocol for area (or occupational group)

APPENDIX P

Investigating PPD Test Conversions And Active TB In Employees or Inmates

I. Investigating PPD test conversions in employees or inmates

PPD test conversions may be detected in employees or inmates as a result of a contact investigation, in which case the probable source of exposure and transmission is already known, or as a result of routine screening, in which case the probable source of exposure and infection is not already known and may not be immediately apparent.

If a skin test conversion in an employee or inmate is identified as part of routine screening, the following steps will be considered:

- The employee or inmate shall be evaluated promptly for active TB. The initial evaluation will include a thorough history, physical examination, and chest radiograph. Based on the initial evaluation, other diagnostic procedures (e.g., sputum examination) will be considered.
- If appropriate, the employee or inmate will be placed on treatment for latent TB infection or active TB disease in accordance with current guidelines.
- A history of possible exposure to *M. tuberculosis* will be obtained from the employee or inmate to determine the most likely source of infection. When the source of infection is known, the drug-susceptibility pattern of the *M. tuberculosis* isolate from the source patient will be examined to determine appropriate preventive or curative therapy regimens.
- If the history does not suggest that the employee or inmate was exposed and infected outside the facility but does identify a probable source of exposure in the facility, contacts of the suspected source patient will be identified and evaluated. Possible reasons for the exposure and transmission will be evaluated, interventions will be implemented to correct these causes, and PPD testing of PPD-negative employees and inmates will be performed immediately and repeated after 3 months.

If no additional PPD test conversions are detected on follow-up testing, the investigation can be terminated.

If additional PPD test conversions are detected on follow-up testing, the possible reasons for exposure and transmission will be reassessed, the appropriateness of and degree of adherence to the interventions implemented

will be evaluated, and PPD testing of PPD-negative employees and inmates will be repeated after another 3 months.

If no additional PPD test conversions are detected on the second round of follow-up testing, the investigation can be terminated. However, if additional PPD conversions are detected on the second round of testing, a high-risk protocol will be implemented in the affected area or occupational group, and persons with expertise in TB infection control will be consulted.

- If the history does not suggest that the employee or inmate was exposed to and infected with *M. tuberculosis* outside the facility and does not identify a probable source of exposure in the facility, further investigation to identify the probable source patient in the facility is warranted.

The interval during which the employee or inmate could have been infected will be estimated. Generally, this would be the interval from 10 weeks before the most recent negative PPD test through 2 weeks before the first positive PPD test (i.e., the conversion).

Laboratory and health service records will be reviewed to identify all employees or inmates who have suspected or confirmed infectious TB and who could have transmitted *M. tuberculosis* to the infected employee or inmate.

If this process does identify a likely source patient, contacts of the suspected source patient will be identified and evaluated, and possible reasons for the exposure and transmission will be evaluated. Interventions will be implemented to correct these causes, and PPD testing of PPD-negative employees and inmates will be repeated after 3 months. However, if this process does not identify a probable source case, PPD screening results of other employees or inmates in the same area or occupational group will be reviewed for additional evidence of *M. tuberculosis* transmission. If sufficient additional PPD screening results are not available, appropriate personnel will consider conducting additional PPD screening of other employees or inmates in the same area or occupational group.

If this review and/or screening does not identify additional PPD conversions, transmission within the facility is less likely, and the contact investigation can be terminated. Whether the employee's or inmate's PPD test conversion resulted from exposure and infection within the facility is uncertain; however, the absence of other data implicating facility transmission suggests that the conversion could have resulted from a) unrecognized exposure to *M. tuberculosis* outside the facility; b) with another antigen (e.g., nontuberculous mycobacteria); c) errors in applying, reading, or interpreting the test; d) false positivity caused by the normal variability of the test; or e) false positivity caused by a defective PPD preparation.

If this review and/or screening does identify additional PPD test conversions, facility transmission is more likely. In this situation, the inmate symptom screening process, TB infection-control policies and practices, and engineering controls will be evaluated to identify problems that could have led to exposure and transmission.

If no such problems are identified, a high-risk protocol will be implemented in the affected area or occupational group, and persons with expertise in TB infection control will be consulted.

If such problems are identified, appropriate interventions will be implemented to correct the problem(s), and PPD skin testing of PPD-negative employees and inmates will be repeated after 3 months.

If no additional PPD conversions are detected on follow-up testing, the investigation will be terminated.

If additional PPD conversions are detected on follow-up testing, the possible reasons for exposure and transmission will be reassessed, the appropriateness of and adherence to the interventions implemented will be evaluated, and PPD skin testing of PPD-negative employees and inmates will be repeated after another 3 months.

If no additional PPD test conversions are detected on this second round of follow-up testing, the investigation will be terminated. However, if additional PPD test conversions are detected on the second round of follow-up testing, a high-risk protocol will be implemented in the affected area or occupational group, and persons with expertise in TB infection control will be consulted.

Investigating cases of active TB in Employees

If an employee develops active TB, the following steps will be taken:

- The case will be evaluated epidemiologically, in a manner similar to PPD test conversions in employees, to determine the likelihood that it resulted from occupational transmission and to identify possible causes and implement appropriate interventions if the evaluation suggests such transmission.
- Contacts of the employee (e.g., other employees, inmates, visitors, and others who have had intense exposure to the employee) will be identified and evaluated for TB infection and disease.

FORM 1**SAMPLE
TUBERCULIN SKIN TEST CONSENT FORM**

(Note: Information in this format is not appropriate for persons who do not speak or read English and/or have impaired literacy skills.
It must be translated or interpreted and explained in a language and in a way that they understand.)

I have read, or have had explained to me in a language and a way that I understand, the information about the Mantoux Tuberculin Skin Test. I have had a chance to ask questions which were answered to my satisfaction.
I understand the benefits and risks of the test and request that the test be given to me.

Print Name _____ Date of Birth _____

Signature _____ Date _____

TUBERCULIN SKIN TEST RECORD**TEST ONE:**

Manufacturer & Lot number _____ Manuf. Exp. Date _____ Date vial opened _____

Date & time test applied _____ AM PM Site of injection _____

Name & title of person placing the skin test _____

Signature _____

Date

Date & time test read _____ AM PM **Induration** _____ mm

Significance of skin test reading according to person's risk factors _____

Name & title of person reading & interpreting skin test _____

Signature _____

Date

TEST TWO IF TWO STEP TESTING PERFORMED:

Manufacturer & Lot number _____ Manuf. Exp. Date _____ Date vial opened _____

Date & time test applied _____ AM PM Site of injection _____

Name & title of person placing the skin test _____

Signature _____

Date

Date & time test read _____ AM PM **Induration** _____ mm

Significance of skin test reading according to person's risk factors _____

Name & title of person reading & interpreting skin test _____

Signature _____

Date

FORM 2

Sample

(Note: Information in this format is not appropriate for persons who do not speak or read English and/or have impaired literacy skills. It must be translated or interpreted and explained in a language and in a way that they understand.)

TB Skin Test Refusal

I have refused the administration of a tuberculin skin test. I understand that by refusing this test, there is no way to determine whether or not I am infected with the bacteria that causes tuberculosis, *Mycobacterium tuberculosis*. I understand that I may need to undergo other medical evaluations, procedures or tests, including the possibility of a chest x-ray or sputum specimens in order to determine if I have tuberculosis disease that may spread to others. I understand that if I have tuberculosis infection in my body that goes undetected or untreated, I am at risk for becoming ill with active tuberculosis disease. I understand that if I do develop active tuberculosis disease, I will put other people at risk of tuberculosis disease or infection and I will have to be in isolation/quarantine to prevent this.

As a(n) _____ (insert employee or inmate) of

(insert name of facility), I have been given the opportunity to receive this test at no charge to myself. I will notify

_____ (insert name or position) if I start to develop any signs of tuberculosis such as productive cough, chest pain, fever, chills, night sweats, coughing up blood, tiredness, loss of appetite or unintended weight loss. I also understand that if I have symptoms that are suspected or confirmed to be due to tuberculosis disease, that I will be in isolation/quarantine until I am no longer infectious.

The test and the potential effects of both having the test and refusing the test have been explained to me in a language and in a way that I understand. I have had sufficient opportunity to have my questions answered, however, I still refuse to have a tuberculin skin test.

If in the future I would like a tuberculin skin test, I can receive one at no charge as long as I am with the facility.

Signature: _____ Date: _____

Printed Name: _____ Date of Birth: _____

Witness signature: _____ Date: _____

Printed Name: _____

ACUTE & COMMUNICABLE DISEASE CASE REPORT

Information for completing this form on reverse side

PATIENT INFORMATION	
Case Identification for all Category I and II diseases Patient's Name (Last, First, Middle Initial) _____ Date of Birth (mm/dd/yyyy) _____ Age _____ Gender <input type="checkbox"/> Male <input type="checkbox"/> Female Patient's Address _____ Telephone No. () _____ City _____ State _____ Zip Code _____ County of Residence _____ Patient's Parent / Guardian if patient is a minor (Not needed for STD) _____ Patient's Employer & Occupation or School, Day Care, Institution _____ Patient pregnant? <input type="checkbox"/> Yes <input type="checkbox"/> No If Yes, Due date (mm/dd/yyyy) _____ Patient died of this illness? <input type="checkbox"/> Yes <input type="checkbox"/> No Patient hospitalized? <input type="checkbox"/> Yes <input type="checkbox"/> No Race <input type="checkbox"/> White <input type="checkbox"/> Black <input type="checkbox"/> Asian or Pacific Islander <input type="checkbox"/> Native American <input type="checkbox"/> Other, specify _____ Ethnic Origin <input type="checkbox"/> Hispanic <input type="checkbox"/> Non-Hispanic	
DATA Disease / Organism _____ Date of onset (mm/dd/yyyy) _____ Specimen Type _____ Outbreak related? <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unknown Underlying medical condition? <input type="checkbox"/> Yes, Specify _____ <input type="checkbox"/> No <input type="checkbox"/> Unknown Type of Test or Immunization. Include confirmatory laboratory data and immunization dates _____ Date (mm/dd/yyyy) _____ Results _____	
DISEASES Complete appropriate section for specific disease(s) <div style="display: flex; justify-content: space-between;"> <div style="width: 30%;"> <input type="checkbox"/> Syphilis <input type="checkbox"/> Primary (chancres present) <input type="checkbox"/> Secondary (skin lesions, rash, etc.) <input type="checkbox"/> Early Latent (asymptomatic, less than 1 yr duration) <input type="checkbox"/> Late Latent (over 1 yr duration) <input type="checkbox"/> Neurosyphilis <input type="checkbox"/> Cardiovascular <input type="checkbox"/> Other <input type="checkbox"/> Congenital </div> <div style="width: 30%;"> <input type="checkbox"/> Gonorrhea <input type="checkbox"/> Asymptomatic <input type="checkbox"/> Uncomplicated Urogenital (Urethritis, Cervicitis) <input type="checkbox"/> Salpingitis (PID) <input type="checkbox"/> Ophthalmia/Conjunctivitis <input type="checkbox"/> Other (Arthritis, skin lesions, etc.) <input type="checkbox"/> Resistant Gonorrhea <input type="checkbox"/> Penicillinase - Producing <input type="checkbox"/> Other </div> <div style="width: 30%;"> <input type="checkbox"/> Chlamydia <input type="checkbox"/> Other STD <input type="checkbox"/> Chancroid <input type="checkbox"/> Primary genital herpes infection <input type="checkbox"/> Other STD Salpingitis (PID) </div> </div> Type and Amount of Treatment _____ Has patient been treated? <input type="checkbox"/> Yes <input type="checkbox"/> No Date(s) of Treatment (mm/dd/yyyy) _____	
DISEASES AND HEPATITIS B Salmonella, Shigella, Giardia, Campylobacter, Yersinia, Hepatitis A, and Amebiasis Check below if patient: Yes No Unknown <input type="checkbox"/> is a food handler. <input type="checkbox"/> attends or works at a day care center. <input type="checkbox"/> is a health care worker. <input type="checkbox"/> drinks unpasteurized milk. <input type="checkbox"/> is in contact with animals. If yes, specify: _____ Hepatitis B Results HBsAg <input type="checkbox"/> Positive <input type="checkbox"/> Negative anti-HBs <input type="checkbox"/> Positive <input type="checkbox"/> Negative anti-HBc <input type="checkbox"/> Positive <input type="checkbox"/> Negative anti-HBc-IgM <input type="checkbox"/> Positive <input type="checkbox"/> Negative	
REPORTABLE & COMMENTS Weekly Reportable Diseases Category II (Saturday through Friday) Varicella (Chickenpox) Number of cases _____ Week ending / Date (mm/dd/yyyy) _____ Comments: _____	
SOURCE (REQUIRED) Name and Address of Person or Agency Reporting _____ Telephone No. () _____ Name and Address of Attending Physician _____ Telephone No. () _____	

GENERAL INSTRUCTIONS

seases listed under categories I, II, IV are to be reported to the *local health officer located in the local public health agency of the patient's place of residence*. The category disease must be reported directly to the state epidemiologist. Use the attached 3-part carbon interleaved form for this purpose. Complete Section A, *Demographic and Morbidity Data*, for diseases in categories I, II, and III. For diseases followed by two asterisks (**), give vaccination history. Follow-up epidemiologic information may be requested by local or state public health officials. Report the number of *Chickenpox* cases (Category IV) weekly by aggregates on the same form as a category I, II, III disease. Complete Section G, person reporting, for *ALL* categories. Send copy "A" and copy "B" to the local health officer. Copy "C" may be retained with the patient's record.

REPORT THE FOLLOWING DISEASES TO YOUR LOCAL HEALTH AGENCY

CATEGORY I:

The following diseases are of urgent health importance and shall be reported **IMMEDIATELY** by telephone to the patient's local health officer upon identification of a case or suspected case. Complete and mail an Acute and Communicable Disease Case Report (DOH 4151) to the local health officer within 24 hours. Public health intervention is expected as indicated. See s. HFS 145.04 (3) (a).

thrax ^{1,4,5}	Foodborne or waterborne outbreaks ^{1,2,3,4}	Hepatitis A ^{1,2,3,4,5}	Poliomyelitis ^{1,4,5}	Smallpox ^{4,5}
tularemia ^{1,4}	Haemophilus influenzae invasive disease, (including epiglottitis) ^{1,2,3,5}	Measles ^{1,2,3,4,5}	Rabies (human) ^{1,4,5}	Tuberculosis ^{1,2,3,4,5}
tularemia, infant ^{1,2,4}		Meningococcal disease ^{1,2,3,4,5}	Ricin toxin ^{4,5}	Yellow Fever ^{1,4}
cholera ^{1,3,4}		Pertussis (whooping cough) ^{1,2,3,4,5}	Rubella ^{1,2,4,5}	
pharyngitis ^{1,3,4,5}		Plague ^{1,4,5}	Rubella (congenital syndrome) ^{1,2,5}	

CATEGORY II:

The following diseases shall be reported to the local health officer on an Acute and Communicable Disease Case Report (DOH 4151) or by other means within 72 hours of the notification of a case or suspect case. Public health intervention is expected as indicated. See s. HFS 145.04 (3) (b).

Amebiasis ^{1,3,4}	Hemolytic uremic syndrome ^{1,2,4}	Malaria ^{1,2,4}	Rocky Mountain spotted fever ^{1,2,4,5}	Toxic shock syndrome ^{1,2}
Arboviral infection (encephalitis / meningitis) ^{1,2,4}	Hepatitis B ^{1,2,3,4,5}	Mumps ^{1,2,4,5}	Salmonellosis ^{1,3,4}	Toxic substance related diseases: Infant methemoglobinemia Lead intoxication (specify Pb levels) Other metal and pesticide poisonings
Babesiosis ^{4,5}	Hepatitis C ^{1,2}	Meningitis, bacterial (other than Haemophilus influenzae or meningococcal) ²	Sexually transmitted diseases: Chancroid ^{1,2}	Toxoplasmosis
Blastomycosis ⁵	Hepatitis non-A, non-B, (acute) ^{1,2}	Meningitis, viral (other than arboviral)	Chlamydia	Trichinosis ^{1,2,4}
Brucellosis ⁴	Hepatitis D ^{2,3,4,5}	Mycobacterial disease (nontuberculous)	Chlamydia trachomatis infection ^{2,4,5}	Tularemia ^{1,4}
Campylobacteriosis infection ^{3,4}	Histoplasmosis ⁵	Psittacosis ^{1,2,4}	Genital herpes infection ^{1,3,4,5}	Typhoid fever ^{1,2,3,4}
Cryptosporidiosis ^{1,2,3,4}	Kawasaki disease ²	Q fever ^{4,5}	Gonorrhea ^{1,3,4,5}	Typhus fever ⁴
Cyclosporiasis ^{1,4,5}	Legionellosis ^{1,2,4}	Rheumatic fever (newly diagnosed) ⁵	Pelvic inflammatory disease ²	Varicella (chickenpox)—report by number of cases only
E. coli O157:H7 ^{1,2,3,4}	Leprosy ^{1,2,3,4,5}		Syphilis ^{1,2,4,5}	Yersiniosis ^{3,4}
Encephalitis, viral (other than arboviral)	Leptospirosis ⁴		Shigellosis ^{1,3,4}	
Ehrlichiosis ^{1,5}	Listeriosis ^{2,4}		Tetanus ^{1,2}	
Giardiasis ^{3,4}	Lyme disease ^{1,2}		Tetanus ^{1,2}	

inspected outbreaks of other acute or occupationally-related diseases

and other enterohemorrhagic E. coli, enteropathogenic E. coli, enteroinvasive E. coli, E. coli^{1,2,3,4}

CATEGORY III:

The following diseases shall be reported to the *state epidemiologist on an AIDS case report (DOH 4265)* or a Wisconsin Human Immunodeficiency Virus (HIV) Infection Confidential Case Report (DOH 4338) or by other means within 72 hours after identification of a case or suspected case. See s. 252.15 (7) (b), Stats., and s. HFS 145.04 (3) (b).

Acquired Immune Deficiency Syndrome (AIDS)^{1,2,4}
Human immunodeficiency virus (HIV) infection^{2,4}
CD4+ T-lymphocyte <200/uL, or CD4+ T-lymphocyte percentage of total lymphocytes of <14

KEY:

Infectious diseases designated as notifiable at the national level.

Wisconsin or CDC follow-up form is required. Local health departments have templates of these forms in the EpiNet manual.

High-risk assessment by local health department is needed to determine if patient or member of patient's household is employed in food handling, day care or health care.

Source investigation by local health department is needed.

Immediate treatment is recommended, i.e., antibiotic or biologic for the patient or contact or both.

WISCONSIN STATUTE CHAPTER 252.05 AND ADMINISTRATIVE RULE CHAPTER HSS 145 REQUIRE REPORTING OF COMMUNICABLE DISEASES.

Persons reporting include any person licensed under ch 441 and 448, stats., or any other person having knowledge that a person has a communicable disease such as:

- a person in charge of infection control at a health care institution.
- School nurses, principals of schools and day care center directors.
- Laboratory directors.

For further information see Wisconsin Administrative Rule HSS 145.